

We claim:

1. A high capacitance energy storage device, comprising:
a housing electrically isolated from, and lined with, conductive, chemically inert separators, said separators electrically connected to contacts mounted on said housing;
5 at least one capacitive cell having a first electrode separated from a second electrode by a non-conductive, chemically inert membrane, said electrodes formed of a carbonised and activated woven fabric impregnated with an electrolyte, said cell being in electrical and mechanical contact with said separators;
wherein said membrane permits free passage of molecules of said electrolyte
10 therethrough.
2. A device according to claim 1, wherein said separators consist of a graphite-based material.
3. A device according to claim 2, wherein said separators consist of graphite sheets.
4. A device according to claim 2, wherein said separators consist of conductive
15 rubber.
5. A device according to claim 2, wherein said separators consist of conductive polymer film.
6. A device according to claim 2, wherein said separators consist of graphite foil.
7. A device according to claim 1, wherein said electrolyte is a sulphuric acid
20 solution.
8. A device according to claim 1, wherein said carbonised, activated woven fabric is formed from hydrocellulose.
9. A device according to claim 1, wherein each said electrodes is formed of a plurality of layers of said carbonised, activated woven fabric.
- 25 10. A device according to claim 1, wherein a single separator separates neighbouring cells.
11. A capacitive cell for a high energy storage device, comprising:
a first electrode separated from a second electrode by a non-conductive, chemically inert membrane, said electrodes formed of a carbonised, activated woven fabric
30 impregnated with an electrolyte, said chemically inert membrane permitting free passage of molecules of said electrolyte therethrough.
12. A device according to claim 11, wherein said electrolyte is a sulphuric acid solution.

13. A device according to claim 11, wherein said carbonised, activated woven fabric is formed from hydrocellulose.
14. A device according to claim 11, wherein each said electrodes is formed of a plurality of layers of said carbonised, activated woven fabric.